LISTING OF CLAIMS

1-10. (Canceled)

11. (Currently Amended) A method for the enzymatic production of terminally or subterminally hydroxylated fatty acids, which comprises

a) converting a fatty acid selected from terminally saturated, branched or unbranched fatty acids with 8 to 30 carbon atoms or fatty acid derivative thereof, selected from C_1-C_4 alkyl esters, amides and anhydrides, in the presence of an electron donor system, ~~using~~ a cytochrome P450 monooxygenase and oxygen wherein said electron donor system comprises an inorganic, non-electrode bound source of electrons and a mediator which is able to transfer electrons from the source of electrons to the enzyme, wherein said enzyme ~~is~~ is a cytochrome P450-containing mono-oxygenase (E.C. 1.14) of the families CYP4, CYP52, CYP102, and wherein the source of electrons is a metal in powder form with a lower standard normal potential than the mediator; and

b) isolating the hydroxylated product(s).

12. (Currently Amended) A method as claimed in claim 11, wherein the ω-hydroxylatable fatty acid derivative is selected from terminally saturated, branched or unbranched ~~C_{12}-C_{30}~~ C_{10}-C_{30} fatty acids.

13. (Canceled)

14. (Currently Amended) A method as claimed in claim 11 ~~13~~, wherein the cytochrome P450 mono oxygenase is a single mutant selected from the group consisting of F87A, F87V, L188K, V26T, R47F and V26T.

15. (Currently Amended) A method as claimed in claim 11 ~~13~~, wherein the cytochrome P450 mono oxygenase is a mutant having ~~has~~ in position 87 the

mutation F87A or F87V and at least one other of the following mutations: L188K, A74G, R47F and V26T.

16. (Currently Amended) A method as claimed in claim 26 ~~11~~, wherein the electron donor system is zinc/Co(III) sepulchrate.

17. (Previously Presented) A method as claimed in claim 11, wherein at least stage a) is carried out in the presence of chloride ions.

18. (Previously Presented) A method as claimed in claim 11, wherein at least stage a) is carried out in the presence of a hydrogen peroxide-cleaving enzyme.

19-22. (Canceled)

23. (New) A method as claimed in claim 11, wherein the mediator has a standard normal potential in the region of less than about -0.4 V.

24. (New) A method as claimed in claim 11, wherein the mediator is selected from cobalt(III) sepulchrate, methylviologen, neutral red, riboflavin, ruthenium triacetate, FMN and FAD.

25. (New) A method as claimed in claim 11, wherein the source of electrons is metallic zinc.

26. (New) A method as claimed in claim 11, selected from the systems:

- Zn/cobalt(III) sepulchrate and
- Zn/neutral red.

27. (New) A method as claimed in claim 12, wherein the ω-hydroxylatable fatty acid derivative is selected from terminally saturated, branched or unbranched C_{12}-C_{30} fatty acid.

28. (New) A method as claimed in claim 12, wherein the ω-hydroxylatable fatty acid derivative is selected from terminally saturated, branched or unbranched C_{12}-C_{25} fatty acid.

29. (New) A method as claimed in claim 12, wherein the ω-hydroxylatable fatty acid derivative is selected from terminally saturated, branched or unbranched C_{12}-C_{20} fatty acid.

30. (New) A method as claimed in claim 11, wherein the cytochrome P450 mono oxygenase is a mutant, which is obtained by amino acid substitution in at least one of positions 26, 47, 72, 74, 87, 188 and 354, of the wild-type enzyme (SEQ ID NO: 35).